

1 **In the Claims**

2 Claims 1, 5, 16, 28 and 29 are amended.

3 Claims 1, 3-16, 18-42 are pending and are listed below:

4
5 1. (Currently Amended) A software architecture embodied on one or
6 more computer-readable storage media, the software architecture for a distributed
7 computing system comprising:

8 an application configured to handle requests submitted by remote devices
9 over a network; and

10 an application program interface organized into multiple root namespaces,
11 the application program interface to present functions used by the application to
12 access network and computing resources of the distributed computing system,
13 wherein calls to the application program interface are handed to a common
14 language runtime layer ~~that can translate Web~~ supporting applications written in
15 one or more different languages and translated into an intermediate supported
16 language, the application program interface comprising various types related to
17 constructing user interfaces, wherein the types belong to a group assigned a group
18 name associated with one of the root namespaces, and wherein each of the types
19 is referenced by a hierarchical name comprising a top level identifier prefixed to
20 the group name.

21
22 2. (Canceled).

23
24 3. (Original) A software architecture as recited in claim 1, wherein the
25 distributed computing system comprises client devices and server devices that

1 handle requests from the client devices, the remote devices comprising at least
2 one client device.

3
4 4. (Original) A software architecture as recited in claim 1, wherein the
5 distributed computing system comprises client devices and server devices that
6 handle requests from the client devices, the remote devices comprising at least
7 one server device that is configured as a Web server.

8
9 5. (Currently Amended) An application program interface embodied
10 on one or more ~~tangible~~ computer readable storage media, comprising: multiple
11 types related to constructing user interfaces, ~~the~~ individual types being associated
12 with one or more groups and being referenced by one or more hierarchical names,
13 wherein each hierarchical name includes a top level identifier prefixed to a group
14 name assigned to one of the one or more groups, the types comprising classes
15 which represent managed heap allocated data that has reference assignment
16 semantics, interfaces that define a contract that other types can implement,
17 delegates that are object oriented function pointers, structures that represent static
18 allocated data that has value assignment semantics and enumerations which are
19 value types that represent named constants, wherein the application program
20 interface is associated with a common language runtime layer ~~that can translate~~
21 ~~Web-supporting~~ applications written in one or more of several different languages
22 and translated into an intermediate language supported by the common runtime
23 layer.

1 6. (Original) An application program interface as recited in claim 5,
2 wherein the classes comprise a forms class that represents a window or a dialog
3 box that makes up an application's user interface.

4
5 7. (Original) An application program interface as recited in claim 6,
6 wherein the forms class has multiple members comprising one or more of: public
7 static properties, public static methods, public instance constructors, public
8 instance methods, public instance properties, public instance events, protected
9 instance properties, and protected instance methods.

10
11 8. (Original) An application program interface as recited in claim 5,
12 wherein the type comprising the interfaces comprises a button control interface
13 that allows a control to act like a button on a form.

14
15 9. (Original) An application program interface as recited in claim 5,
16 wherein the type comprising the interfaces comprises a container control interface
17 that provides functionality for a control to act as a parent for other controls.

18
19 10. (Original) An application program interface as recited in claim 5,
20 wherein the type comprising the interfaces comprises an editing notification
21 interface.

22
23 11. (Original) An application program interface as recited in claim 5,
24 wherein the type comprising the interfaces comprises a data object interface that
25 provides a format independent mechanism for transferring data.

1
2 12. (Original) An application program interface as recited in claim 5,
3 wherein the type comprising the interfaces comprises a feature support interface
4 that specifies a standard interface for retrieving feature information from a current
5 system.

6
7 13. (Original) An application program interface as recited in claim 5,
8 wherein the type comprising the interfaces comprises a message filter interface.

9
10 14. (Original) An application program interface as recited in claim 5,
11 wherein the type comprising the interfaces comprises a handle-exposing interface
12 to expose handles.

13
14 15. (Original) An application program interface as recited in claim 5,
15 wherein the type comprising the interfaces comprises one or more of the
16 following interfaces:

17 a button control interface that allows a control to act like a button on a
18 form;

19 a container control interface that provides functionality for a control to act
20 as a parent for other controls;

21 an editing notification interface;

22 a data object interface that provides a format independent mechanism for
23 transferring data;

24 a feature support interface that specifies a standard interface for retrieving
25 feature information from a current system;

1 a message filter interface; and
2 a handle-exposing interface to expose handles.

3
4 16. (Currently Amended) A distributed computer software architecture
5 embodied on one or more computer-readable storage media, the distributed
6 computer software architecture comprising:

7 one or more applications configured to be executed on one or more
8 computing devices, the applications handling requests submitted from remote
9 computing devices;

10 a networking platform to support the one or more applications;

11 an application programming interface to interface the one or more
12 applications with the networking platform, the application programming interface
13 comprising various types related to constructing user interfaces, individual types
14 being associated with one or more groups and being referenced by one or more
15 hierarchical names, wherein each of the hierarchical names includes a top level
16 identifier prefixed to a group name assigned to one of the one or more groups;
17 and

18 a common language runtime layer ~~that can translate Web supporting~~
19 applications written in one or more different languages and translated into an
20 intermediate language supported by the common runtime layer.

21
22 17. (Canceled).
23
24
25

1 18. (Previously Presented) A distributed computer software architecture
2 as recited in claim 42, wherein the classes comprises a forms class that represents
3 a window or a dialog box that makes up an application's user interface.
4

5 19. (Original) A distributed computer software architecture as recited in
6 claim 18, wherein the forms class has multiple members comprising one or more
7 of: public static properties, public static methods, public instance constructors,
8 public instance methods, public instance properties, public instance events,
9 protected instance properties, and protected instance methods.
10

11 20. (Previously Presented) A distributed computer software architecture
12 as recited in claim 42, wherein the type comprising the interfaces comprises a
13 button control interface that allows a control to act like a button on a form.
14

15 21. (Previously Presented) A distributed computer software architecture
16 as recited in claim 42, wherein the type comprising the interfaces comprises a
17 container control interface that provides functionality for a control to act as a
18 parent for other controls.
19

20 22. (Previously Presented) A distributed computer software architecture
21 as recited in claim 42, wherein the type comprising the interfaces comprises an
22 editing notification interface.
23

24 23. (Previously Presented) A distributed computer software architecture
25 as recited in claim 42, wherein the type comprising the interfaces comprises a

1 data object interface that provides a format independent mechanism for
2 transferring data.

3
4 24. (Previously Presented) A distributed computer software architecture
5 as recited in claim 42, wherein the type comprising the interfaces comprises a
6 feature support interface that specifies a standard interface for retrieving feature
7 information from a current system.

8
9 25. (Previously Presented) A distributed computer software architecture
10 as recited in claim 42, wherein the type comprising the interfaces comprises a
11 message filter interface.

12
13 26. (Previously Presented) A distributed computer software architecture
14 as recited in claim 42, wherein the type comprising the interfaces comprises a
15 handle-exposing interface to expose handles.

16
17 27. (Previously Presented) A distributed computer software architecture
18 as recited in claim 42, wherein the type comprising the interfaces comprises one
19 or more of the following interfaces:

20 a button control interface that allows a control to act like a button on a
21 form;

22 a container control interface that provides functionality for a control to act
23 as a parent for other controls;

24 an editing notification interface;

1 a data object interface that provides a format independent mechanism for
2 transferring data;

3 a feature support interface that specifies a standard interface for retrieving
4 feature information from a current system;

5 a message filter interface; and

6 a handle-exposing interface to expose handles.

7
8 28. (Currently Amended) A computer system including one or more
9 microprocessors and one or more software programs, the one or more software
10 programs utilizing an application program interface to request services from an
11 operating system, the application program interface including separate commands
12 to request services comprising services related to constructing user interfaces,
13 wherein the application program interface groups API functions into multiple
14 namespaces that define a collection of classes which represent managed heap
15 allocated data that has reference assignment semantics, interfaces that define a
16 contract that other types can implement, delegates that are object oriented
17 function pointers, enumerations which are value types that represent named
18 constants and structures that represent static allocated data that has value
19 assignment semantics, the application program interface being associated with a
20 common language runtime layer ~~that can translate Web~~ supporting applications
21 written in one or more different languages and translated into an intermediate
22 language supported by the common runtime layer.

23
24 29. (Currently Amended) A method, comprising:
25

1 managing network and computing resources for a distributed computing
2 system; and

3 exposing a set of functions that enable developers to access the network
4 and computing resources of the distributed computing system, the set of functions
5 comprising functions to facilitate construction of user interfaces, wherein the
6 functions are grouped into multiple namespaces that define a collection of classes
7 which represent managed heap allocated data that has reference assignment
8 semantics, interfaces that define a contract that other types can implement,
9 delegates that are object oriented function pointers, enumerations which are value
10 types that represent named constants and structures that represent static allocated
11 data that has value assignment semantics; and

12 using a common language runtime layer ~~that can translate Web~~ supporting
13 applications written in one or more different languages and translated into an
14 intermediate language supported by the common runtime layer.

15
16 30. (Original) A method as recited in claim 29, further comprising
17 receiving a request from a remote computing device, the request containing a call
18 to the set of functions.

19
20 31. (Previously Presented) A method, comprising creating a namespace
21 with functions that enable drawing and construction of user interfaces, the
22 namespace defining classes which represent managed heap allocated data that has
23 reference assignment semantics, interfaces that define a contract that other types
24 can implement, delegates that are object oriented function pointers, structures that
25

1 represent static allocated data that has value assignment semantics, and
2 enumerations which are value types that represent named constants.

3
4 32. (Original) A method as recited in claim 31, wherein the namespace
5 defines a forms class that represents a window or a dialog box that makes up an
6 application's user interface.

7
8 33. (Original) A method as recited in claim 32, wherein the forms class
9 has multiple members comprising one or more of: public static properties, public
10 static methods, public instance constructors, public instance methods, public
11 instance properties, public instance events, protected instance properties, and
12 protected instance methods.

13
14 34. (Original) A method as recited in claim 31, wherein the namespace
15 defines an interface comprising a button control interface that allows a control to
16 act like a button on a form.

17
18 35. (Original) A method as recited in claim 31, wherein the namespace
19 defines an interface comprising a container control interface that provides
20 functionality for a control to act as a parent for other controls.

21
22 36. (Original) A method as recited in claim 31, wherein the namespace
23 defines an interface comprising an editing notification interface.

1 37. (Original) A method as recited in claim 31, wherein the namespace
2 defines an interface comprising a data object interface that provides a format
3 independent mechanism for transferring data.

4
5 38. (Original) A method as recited in claim 31, wherein the namespace
6 defines an interface comprising a feature support interface that specifies a
7 standard interface for retrieving feature information from a current system.

8
9 39. (Original) A method as recited in claim 31, wherein the namespace
10 defines an interface comprising a message filter interface.

11
12 40. (Original) A method as recited in claim 31, wherein the namespace
13 defines an interface comprising a handle-exposing interface to expose handles.

14
15 41. (Previously Presented) A software architecture as recited in claim 1,
16 wherein the various types comprise classes, interfaces, delegates, structures and
17 enumerations.

18
19 42. (Previously Presented) A distributed computer software architecture
20 as recited in claim 16, wherein the various types comprise classes, interfaces,
21 delegates, structures and enumerations.